● PRINTER RUSH ●

(PTO ASSISTANCE)

IFW

Application :	10/075706	**Examiner :**	Dang	**GAU :**	2818
From:	LAS	**Location:**	(IDC) FMF FDC	**Date:**	7/8/05

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[RUSH] **MESSAGE:** Please provide the missing step number on page 11, line 20 of the specification.

Thank you

[XRUSH] **RESPONSE:** OK

Rel Attn'y

INITIALS: VV

NOTE: This form will be included as part of the official USPTO record, with the Response document coded as XRUSH.

REV 10/04

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from agents in the plastic package 102, ball bond fracture 104, package cracks, and the like.

One of the major paths for moisture ingress in all plastic package devices is where the leads exit the plastic package. The adhesion between the metal and plastic is not good, partly because of release agents added to the resin to ease in the removal of the cured parts from the transfer mold. The narrow gap caused by this metal/plastic separation results in high capillary forces that can draw moisture into the package, along the bond wires and finally to the die. Sealing this gap effectively has proven difficult since flexing the lead, or heating the lead during soldering can break this tenuous seal.

FIGS. 2 through 6 below represent one approach in accordance with the teachings herein to hermetically sealing the integrated semiconductor circuit die, wires, and wire bonds so as to prevent the infusion of contaminants, and thus contamination and ultimately failure of the plastic packaged system.

Referring next to FIG. 2 (and step 600 in FIG. 6), shown is an assembly made up of the die, the wires, the wire bonds and the leads (which, as mentioned above are, at this point, part of a lead frame. This assembly, such as may be used in the plastic package system of FIG. 1 is also one possible starting point for the present embodiments.

As can be seen, the wires are connected electrically between respective bonding pads on an upper surface of the integrated semiconductor circuit die and respective leads of the lead frame.

The bonding of the wires to the bonding pads and to the leads may be achieved in a conventional manner using, for example, thermocompression, thermosonic ultrasonic bonding techniques, as are well known in the art.